

**WHAT IS CLAIMED IS:**

1           1. An electronic toy gun for a toy shooting game, the toy gun comprising:  
2           an infrared beam emitter configured to emit an encoded infrared beam;  
3           a trigger configured to activate a state of emission of the infrared beam by the  
4           infrared beam emitter so as to indicate that a weapon is being fired;  
5           a game data input device configured to receive game data input from a user; and  
6           an internal processor configured to receive the game data input from the game data  
7           input device and to cause the infrared beam emitter to emit an infrared beam that is coded  
8           with one of a plurality of codes based on the game data input.

1           2. The electronic toy gun of claim 1 wherein the game data input is a code and  
2           the internal processor is configured to retrieve corresponding detailed instructions from a  
3           memory corresponding to the code.

1           3. The electronic toy gun of claim 1 wherein the trigger is configured to activate  
2           the state of emission of the infrared beam so as to indicate that the weapon is being fired by  
3           varying the encoding of the infrared beam.

1           4. The electronic toy gun of claim 1 wherein the game data input corresponds to  
2           characteristics of at least one game character and wherein the infrared beam is encoded  
3           according to the characteristics of the game character so that an opponent can detect the  
4           characteristics of the game character.

1           5. The electronic toy gun of claim 4 wherein the electronic toy gun further  
2           comprises a detector for detecting an encoded infrared beam of an opponent and wherein the  
3           processor is programmed to detect characteristics of a game character corresponding to the  
4           encoded infrared beam of the opponent and to compare the characteristics of the game  
5           character corresponding to the game data input with the characteristics of a game character  
6           corresponding to the encoded infrared beam of the opponent in order to determine an  
7           outcome of an engagement with the opponent.

1           6. The electronic toy gun of claim 4 wherein the characteristics of the game  
2 character include one or more of the game character's weapons, armor rating, weapon speed  
3 rating, and vulnerability, and wherein the infrared beam is coded to reflect the characteristics  
4 of the game character.

1           7. The electronic toy gun of claim 4 wherein the characteristics of the game  
2 character include one or both of a weapon beam range and a weapon beam width.

1           8. The electronic toy gun of claim 1 further comprising a feedback device  
2 configured to provide variable feedback corresponding a measure of a player's game  
3 condition,

4           wherein the internal processor is further configured to calculate the measure of the  
5 player's game condition.

1           9. The electronic toy gun of claim 8 wherein the feedback device comprises a  
2 display configured to display one or more of damage to a player, hits to a player, energy  
3 remaining, distance between a player and an opponent, characteristics of an opponent's  
4 weapon, a depiction of a character associated with the toy gun, and special/defensive weapon  
5 usage remaining.

1           10. The electronic toy gun of claim 9 wherein the display is a liquid crystal  
2 display.

1           11. The electronic toy gun of claim 8 wherein the feedback device comprises an  
2 audio device configured to provide one or more of damage to a player, hits to a player,  
3 energy remaining, distance between a player and an opponent, characteristics of an  
4 opponent's weapon, a character associated with the toy gun, and special/defensive weapon  
5 usage remaining.

1           12. The electronic toy gun of claim 1 wherein the game data input device  
2 comprises a card reader.

1           13. The electronic toy gun of claim 1 wherein the card reader is configured to read  
2 a card that includes game data.

1           14. An electronic toy gun for a toy shooting game, the toy gun comprising:  
2           an infrared beam emitter configured to emit an infrared beam;  
3           a trigger configured to activate a state of emission of the infrared beam by the  
4 infrared beam emitter so as to indicate that a weapon is being fired;  
5           a beam detector configured to detect an infrared beam emitted by another electronic  
6 toy gun; and

7           an internal processor configured to receive a signal from the beam detector and to  
8 categorize the infrared beam detected by the beam detector within one of a plurality of  
9 strength categories.

1           15. The electronic toy gun of claim 14 wherein the infrared beam emitter is  
2 configured to emit the infrared beam at each of a plurality of differing strengths and to  
3 encode the infrared beam differently at each of the differing strengths; wherein the beam  
4 detector is configured to detect the infrared beam emitted by the other toy gun at each of the  
5 plurality of differing strengths and to detect differing encodings of the infrared beam emitted  
6 by the other toy gun at each of the differing strengths; and wherein the processor is  
7 configured to categorize the infrared beam detected by the beam detector within one of a  
8 plurality of strength categories by determining whether the infrared beam detected by the  
9 beam detector is above a minimum threshold when encoded according to each of the  
10 differing encodings.

1           16. The electronic toy gun of claim 14 wherein the detected infrared beam is  
2 registered as a hit based on the strength category detected and based on a nature of a weapon  
3 corresponding to the detected infrared beam as indicated by an encoding of the infrared  
4 beam.

1 17. The electronic toy gun of claim 14 wherein the detected infrared beam is  
2 registered as a hit based on the strength category detected and based on a detected range of a  
3 weapon corresponding to the detected infrared beam as indicated by an encoding of the  
4 infrared beam.

1 18. The electronic toy gun of claim 14 wherein the detected infrared beam is  
2 registered as a hit based on the strength category detected and based on a vulnerability of a  
3 game character selected by the user.

1 19. An electronic toy gun for a toy shooting game, the toy gun comprising:  
2 an infrared beam emitter configured to emit an encoded infrared beam;  
3 a trigger configured to activate a state of emission of the infrared beam by the  
4 infrared beam emitter so as to indicate that a weapon is being fired; and  
5 an internal processor configured to select one of a plurality of virtual beam shapes  
6 and to cause the infrared beam emitter to emit a selectable infrared beam that is coded with  
7 one of a plurality of codes reflecting the differing virtual beam shapes.

1 20. The electronic toy gun of claim 19 wherein the virtual beam shape comprises  
2 a beam range.

1 21. The electronic toy gun of claim 19 wherein the virtual beam shape comprises  
2 a beam width.

1 22. An electronic toy gun for a toy shooting game, the toy gun comprising:  
2 an infrared beam emitter configured to emit an infrared beam;  
3 a trigger configured to activate a state of emission of the infrared beam by the  
4 infrared beam emitter so as to indicate that a weapon is being fired;  
5 an internal processor configured to calculate a measure of a player's game condition;  
6 and  
7 a feedback device configured to provide variable feedback corresponding to the  
8 calculation of the measure of the player's game condition.

1           23. The electronic toy gun of claim 22 wherein the feedback device comprises a  
2 display configured to display one or more of damage to a player, hits to a player, energy  
3 remaining, distance between a player and an opponent, characteristics of an opponent's  
4 weapon, a depiction of a character associated with the toy gun, and special/defensive weapon  
5 usage remaining.

1           24. The electronic toy gun of claim 22 wherein the feedback device comprises an  
2 audio device configured to provide one or more of damage to a player, hits to a player,  
3 energy remaining, distance between a player and an opponent, characteristics of an  
4 opponent's weapon, a character associated with the toy gun, and special/defensive weapon  
5 usage remaining.

1           25. The electronic toy gun of claim 22 wherein the feedback device comprises a  
2 liquid crystal display.

1           26. An infrared toy grenade comprising:  
2           a grenade body configured to be projected from a first location to a second location;  
3           at least one array of infrared beam emitters positioned within the body and configured  
4 to emit an array of infrared beams from the body;  
5           a switch configured to be operated to activate the array of infrared beam emitters; and  
6           a delay configured to provide a time delay between the operation of the switch and  
7 the activation of the array of infrared beam emitters.